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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,628	06/30/2004	Maya Benson	CE31103P	2975
22917	7590	02/10/2006	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			LAM, DUNG LE	
			ART UNIT	PAPER NUMBER
			2687	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/500,628	BENSON ET AL.	
	Examiner	Art Unit	
	Dung Lam	2687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 and 15 are objected to because of the following informalities:
2. Claims 1, 4, 5, 14, 15, 17, 18, 25, 27, 29, 28 and 15 cite "**the** frequency of updates" even though they were not previously mentioned and should be corrected to --a frequency of measurement updates -- to be consistent.
3. Claims 1 and 15 also cite "in response to **the** ... **the** frequency of measurement updates". The extra article "**the**" should be removed and the limitations should change to --in response to ... **the** frequency of measurement updates". Appropriate correction is required--.
4. Claims 10, 11 and 12 cite "**the** update frequency capability of the subscriber unit" even though they were not previously mentioned in their independent claims. Therefore, they should be corrected to -- **an** update frequency capability of the subscriber unit --.
5. Claims 1, 4, 5, 14, 15, 17, 18, 25, 27, 29, 28 and 15 cite "frequency of measurement updates". Since the present invention is related to measuring frequencies, the usage of "frequency" in this context is confusing and can be misunderstood as a radio frequency of measurement update rather than how frequently measurements are updated. For examination purpose and applicant convenience, the examiner interprets the phrase "frequency of measurement update" as "how often measurements are updated".

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim **1-4, 6,13,15-17,24, 27-28, 34** are rejected under 35 U.S.C. 102(b) as being anticipated by **Menich et al.** (US Patent No. 5327575).

8. Regarding **claim 1**, **Menich** teaches a method of selecting carriers to be measured by a subscriber unit served by a cellular communication system and operable to measure carriers in a frequency band (see Abstract and Col. 3-5):

Dynamically determining a frequency of measurement updates of the subscriber unit related when measuring carriers in the frequency band (Col. 3, lines 50-55, col.4 lines 44-64, col.5 lines 10-45, Abstract). The cited columns describe the base site frequency list being dynamically generated based on the dynamic determination of the timing advance. Since the timing advance affects how fast it takes to communicate and thus to send measurements reports back and forth between MS and BS, the step of determining the timing advance also reflects how often measurements are updated which reads on the broad limitation of dynamically determining a frequency of measuring updates.

and selecting a subset of carriers in the frequency band to be measured by the subscriber unit in response to the frequency of measurement updates (Col. 3, lines 50-55, col.4 lines 44-64, col.5 lines 10-45).

9. Regarding claims **15**, it is an apparatus claims corresponding to the above method claim 1. Therefore, they are rejected for the same reasons as claims 1.

10. Regarding **claim 2 and 16**, **Menich** teaches all the limitations of claim 1 and 15 respectively. **Menich** further teaches the step and means of transmitting identification of the subset of carriers to the subscriber unit (Col. 3, lines 50-55).

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11. Regarding **claim 3**, **Menich** teaches all the limitations of claim 1 (see claim 1 above). **Menich** further teaches the step of the subscriber unit measuring the carriers of the subset of carriers (Col. 4, lines 20-29).

12. Regarding **claims 27**, it teaches a subscriber unit that have the limitations corresponding to the above combined method claims of 1 and 3. Therefore, it is rejected for the same reasons as claims 1 and 3 (see claim 1 and 3 above).

13. Regarding **claims 4, 17 and 28**, **Menich** teaches all the limitations of claim 1, 15 and 27 respectively. **Menich** further teaches the frequency of measurement updates is indicative of the time required for the subscriber unit to measure carriers (Col. 3, lines 50-55, col.4 lines 44-64, col.5 lines 10-45, Abstract, see claim 1 above).

14. Regarding **claim 13, 24 and 34**, **Menich** teaches all the limitations of claim 1, 15 and 27 respectively. **Menich** further teaches the step and means of determining a handover candidate carrier from the subset of carriers (Col. 4, lines 20-29).

#### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim **5-10, 14,18-22 and 29-33** are rejected under 35 U.S.C. 103(a) as being unpatentable **Menich et al.** (US Patent No. 5327575) in view of **ETSI TR 125 922 v3.4.0 2000-12** (simply denoted as "**3GPPStandard**").

17. Regarding **claim 5**, **Menich** teaches all the limitations of claim 1 (see claim 1 above). However, **Menich** fails to teach that the frequency of measurement updates is indicative of the number of receivers in the subscriber unit. In analogous art, **3GPPStandard** teaches a UE can do measurements in Compressed Mode if it has only one receiver and alternatively the receiver need not use Compressed Mode to perform measurements when it has a dual receiver, (P.14, Section 5.1.5.1-5.1.5.2.5 and 5.1.6.1). Therefore, it would have been obvious for one of

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ordinary skill in the art at the time of the invention to modify **Menich's** teaching of frequency of measurement updates to be indicative to number of receivers of the subscriber taught by 3GPPStandard. Because knowing how many receivers a subscriber has would allow the network to have a better judgment of assigning the appropriate number of carriers that a subscriber can handle/measure without being overloaded, thus the handoff measurement quality is increased.

18. Regarding **claim 6**, **Menich** teaches all the limitations of claim 1 (see claim 1 above). However, **Menich** fails to teach that the frequency band is a frequency band of a second communication system. In an analogous art, 3GPP2000 teaches that in a handover process from 3G to 2G, inter-system needs to notify the UE of the existing GSM frequencies in the area (P. 14, section 5.1.5.1).

19. Regarding **claim 7**, **Menich** teaches all the limitations of claim 1 (see claim 1 above). However, **Menich** fails to teach that the cellular communication system and the second communication system use different radio access technologies. In an analogous art, 3GPP2000 teaches Inter Radio Access Technology Handover (P.14, Title of Section 5.1.5). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to modify **Menich's** teaching of measuring the carriers to also include the handover between different radio technologies because it would allow the system to be compatible with the new technologies and thus be more integrate-able.

20. Regarding **claim 8**, **Menich** and 3GPP2000 teach all the limitations of claim 7 (see claim 7 above). 3GPP2000 further teaches the cellular communication system is a GSM communication system (**2G**) and the second communication system is a UMTS (**3G**) communication system (p14, section 5.1.5.2).

21. Regarding **claim 9**, **Menich** and 3GPP2000 teach all the limitations of claim 7 (see claim 7 above). 3GPP2000 further teaches the communication system is a UMTS communication system and the second communication system is a GSM communication system (Handover 3G to 2G, page 14, section 5.1.5.1).

22. Regarding **claim 10**, **Menich** teaches all the limitations of claim 1 (see claim 1 above). However, **Menich** fails to teach that the update frequency capability of the subscriber unit is determined from a subscriber unit capability report indicating if compressed mode is required to perform measurements on a GSM communication system. In analogous art, **3GPPStandard** teaches a UE can do measurements in Compressed Mode if it has only one receiver and

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alternatively the receiver need not use Compressed Mode to perform measurements when it has a dual receiver, (P.14, Section 5.1.5.1-5.1.5.2.5 and 5.1.6.1). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to modify **Menich's** teaching of frequency of measurement updates to be indicative to number of receivers of the subscriber taught by 3GPPStandard. Because knowing how many receivers a subscriber has would allow the network to have a better judgment of assigning the appropriate number of carriers that a subscriber can handle/measure without being overloaded, thus the handoff measurement quality is increased.

23. Regarding **claim 14**, **Menich** teaches all the limitations of claim 1 (see claim 1 above). Although they fail to teach specifically that the frequency of measurement updates is determined from the number of measurement reports reported from the subscriber unit within a given time interval, 3GPP2000 teaches that the number of cells which can be reported by the UE depends on the characteristics of the activated compressed mode patterns (Page 18, section 5.1.6). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to derive the performance characteristic (single or dual mode receiver) based on the number of the reports to select a re pertinent set of carriers to be measured.

24. Regarding claims **18 – 22**, they are apparatus claims corresponding to the above method claims of 5- 9 respectively. Therefore, they are rejected for the same reasons as claims 5- 9 respectively.

25. Regarding **claims 29-33**, they are claims relating to a subscriber unit that corresponds to the above method claims of 5-9. Therefore, they are rejected for the same reasons as claims 5- 9 respectively.

26. Claims **11, 12 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Menich et al.** (US Patent No. 5327575) in view of **ETSI TR 125 922 v3.4.0 2000-12** (simply denoted as “**3GPP2000**”) and further in view of **Lupien** (US Patent No. 5857153).

27. Regarding **claim 11 and 23**, **Menich** and 3GPP2000 teach all the limitations of claim 7 and 15 respectively. However, they fail to teach that the size of the subset of carriers is

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dependent on an update frequency capability of the subscriber unit. In an analogous art, Lupien teaches that when a dual-band capable receive a neighbor list of both 800 and 1900 MHz while the mobile stations that only operates at the 800MHz receives only neighbor cells operating at 800MHz (Col. 6, lines 49-55). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made add the feature of measuring only the frequencies that the UE is capable of measuring to ensure high accuracy for handoff.

28. Regarding **claim 12**, **Menich** teaches all the limitations of claim 1 (see claim 1 above). Lupien further teaches the limitations wherein the subset of carriers is an ordered subset of carriers and the order of carriers in the subset of carriers is the update frequency capability of the subscriber unit (neighbor cells indicated in a measurement order from the base station, Col. 6, lines 45-47).

### ***Response to Amendment***

Applicant's arguments, filed 11/22/05, with respect to the rejection(s) of claim(s) 1-34 under 103(a) have been fully considered but and moot in view of the new ground(s) of rejection.



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**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Lam whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL

  
**SONNY TRINH**  
**PRIMARY EXAMINEE**